

MEMORANDUMRECEIVED

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2015 MAR 16 P 3: 34

FROM:

Steven M. Olea

Director

Utilities Division

AZ-CORP COMMISSIC ORIGINAL

DATE:

March 16, 2015

RE:

STAFF REPORT FOR GREENEHAVEN WATER COMPANY, INC.'S

APPLICATION FOR A RATE INCREASE (DOCKET NO. W-02325A-14-0322).

Attached is the Staff Report for Greenehaven Water Company, Inc.'s application for a rate increase. Staff recommends approval of the rate increase application using Staff's recommended rates and charges.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before March 26, 2015.

SMO:PNT:nr\RRM

Originator: Phan Tsan

Arizona Corporation Commission DOCKETED

MAR 1 6 2015

DOCKETED BY

Service List for: GREENEHAVEN WATER COMPANY, INC. Docket No. W-02325A-14-0322

Mr. Terry Theken President Greenehaven Water Company, Inc. Post Office Box 5122 Page, Arizona 86040

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STAFF REPORT UTILITIES DIVISION ARIZONA CORPORATION COMMISSION

GREENEHAVEN WATER COMPANY, INC. DOCKET NO. W-02325A-14-0322

APPLICATION FOR A PERMANENT RATE INCREASE

MARCH 16, 2015

STAFF ACKNOWLEDGMENT

The Staff Report for Greenehaven Water Company, Inc., Docket No. W-02325A-14-0322 is the responsibility of the Staff members listed below. Phan Tsan is responsible for the financial review and analysis of the Company's application, recommended revenue requirement, rate base and rate design. Jeff Francis is responsible for the engineering and technical analysis. Carmen Madrid is responsible for reviewing the Commission's records on customer complaints filed with the Commission.

Phan Tsan

Public Utilities Analyst I

Jeff Francis Utilities Engineer

Carmen Madrid

Public Utilities Consumer Analyst I

EXECUTIVE SUMMARY GREENEHAVEN WATER COMPANY, INC. DOCKET NO. W-02325A-14-0322

Greenehaven Water Company, Inc. ("Greenehaven Water" or "Company") filed an application for a permanent rate increase with the Arizona Corporation Commission ("Commission") on September 3, 2014. The application was deemed sufficient on December 31, 2014.

Greenehaven Water is a Class D water utility company that provides public utility water service to 315 metered connections in the Greenehaven Development, which is an isolated development, adjacent to the Lake Powell National Recreation Area located in Coconino County approximately six miles northeast of Page, Arizona.

The Company proposed a \$50,000 or 91.84 percent increase over the test year revenue of \$54,440 to \$104,440. The Company proposed revenue would result in an operating income of \$20,074 for an 86.24 percent rate of return and an operating margin of 19.22 percent. The Company has proposed an original cost rate base ("OCRB") of \$23,277. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,934 gallons from \$11.90 to \$20.71, for an increase of \$8.81, or 74.00 percent.

Staff recommends a \$29,046 or 53.35 percent increase over the test year revenue of \$54,440 to \$83,486. Staff's recommended revenues would result in an operating income of \$10,274 for a 70.90 percent rate of return and an operating margin of 12.31 percent. Staff recommends an OCRB of \$14,491. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,934 gallons from \$11.90 to \$12.93, for an increase of \$1.03, or 8.68 percent.

STAFF RECOMMENDATIONS

Staff recommends:

- 1. Approval of its recommended rates and charges as shown in Schedule PNT-W5.
- 2. That the Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
- 3. That the Company use the depreciation rates presented in Table C of the attached Engineering Report on a going forward basis.
- 4. That the Company be ordered to keep invoices plant assets purchased in the future.
- 5. The Company use a 4-factor allocation to charge indirect costs.
- 6. Lost water for Greenehaven Water was calculated to be 15.85 percent in 2013 which exceeds acceptable limits. Staff recommends that Greenehaven Water monitor the

water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meter each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent, the Company shall prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

- 7. That Greenehaven Water file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at http://www.azcc.gov/Divisions/Utilities/forms.asp. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.
- 8. That Greenehaven Water post a sign at its well and tank site which meets the following. The sign should comply with Arizona Department of Environmental Quality ("ADEQ") requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s). Staff further recommends that the Company file documentation with Docket Control demonstrating compliance within forty-five (45) days of the effective date of the Commission Decision in this matter.

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To to at n	A

FACT SHEET

Type of Ownership: Arizona C Corporation.

Location: The Company provides potable water service to an area located between in Coconino County approximately six miles northeast of Page, Arizona.

Active Management Area: The Company is not located in an Active Management Area.

Rates:

Permanent rate increase application filed: September 3, 2014

Current test year ended: December 31, 2013

Prior test year ended: December 31, 1984

Current Rates: Decision No. 54777 dated November 13, 1985

Monthly Minimum Rate	Company Current <u>Rates</u>	Company Proposed <u>Rates</u>	Staff Recommended <u>Rates</u>
Residential Monthly Minimum Charge 5/8 x 3/4 inch (Gallons included in the minimum)	\$9.00 1,000	\$16.57 0	\$10.00 0
Commodity Rate (Per 1,000 gallons)			
Flat Rate	\$1.50	N/A	N/A
5/8 x 3/4 inch (Residential) 0 to 3,000 gallons 3,001 to 9,000 gallons Over 9,000 gallons	N/A N/A N/A	\$ 1.41 2.12 2.54	\$ 1.00 2.40 3.50
Typical 5/8x3/4 or 3/4-inch residential bill			
Average use (5,032 gallons) Median use (2,934 gallons)	\$15.05 11.90	\$25.11 20.71	\$17.88 12.93

Customers

Number of customers in the current test year (December 31, 2013): 315

Notifications

Company filed Customer Notification on October 31, 2014.

Complaints

Number of opinions filed against the rate increase application: 7.

Percentage of opinions to customer base: 2.22 percent (7/315).

Number of customer complaints filed against the company from January 1, 2012 to September 9, 2014:0

SUMMARY OF FILING

The test year results as adjusted by Utilities Division Staff ("Staff") for Greenehaven Water Company, Inc. ("Greenehaven Water" or "Company") show total operating revenue of \$54,440, an operating loss of \$12,666, for no rate of return, as shown on Schedule PNT-1. The original cost rate base ("OCRB") as adjusted by Staff is \$14,491.

The Company proposed a \$50,000 or 91.84 percent increase over the test year revenue of \$54,440 to \$104,440. The Company proposed revenue would result in an operating income of \$20,074, for an 86.24 percent rate of return and an operating margin of 19.22 percent. The Company has proposed an original cost rate base ("OCRB") of \$23,277. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,934 gallons from \$11.90 to \$20.71, for an increase of \$8.81, or 74.00 percent.

Staff recommends a \$29,046 or 53.35 percent increase over the test year revenue of \$54,440 to \$83,486. Staff's recommended revenues would result in an operating income of \$10,274 for a 70.90 percent rate of return and an operating margin of 12.31 percent. Staff recommends an OCRB of \$14,491. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,934 gallons from \$11.90 to \$12.93, for an increase of \$1.03, or 8.68 percent.

During the test year ended December 31, 2013, Greenehaven Water provided public utility water service to 315 metered connections in the Greenehaven Development.

The Company is registered as an Arizona "C" corporation with the Corporations Division of the Arizona Corporation Commission ("Commission").

BACKGROUND

Greenehaven Water is a Class D water utility company that provides public utility water service to 315 metered connections in the Greenehaven Development, which is an isolated development, adjacent to the Lake Powell National Recreation Area located in Coconino County approximately six miles northeast of Page, Arizona.

The Company provides water services mostly to small residential customers.

On September 3, 2014, Greenehaven Water filed an application for a permanent rate increase. On December 31, 2014, Staff issued a Letter of Sufficiency.

CONSUMER SERVICES

A review of the Consumer Services Section database revealed that there were 7 opinions filed opposing the rate increase request. No complaints were filed against the Company from January 2012 to September 2014. A notarized affidavit of mailing for the rate application was filed on October 31, 2014.

COMPLIANCE

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Greenehaven Water.

ENGINEERING ANALYSIS AND RECOMMENDATIONS

Staff inspected Greenehaven Water's plant facilities on September 24, 2014. A complete discussion of Staff's technical findings and recommendations and a complete description of the water system are provided in the attached Engineering Report.

RATE BASE

Staff's adjustments decreased the Company's proposed rate base by \$8,786, from \$23,277 to \$14,491, as shown on Schedule PNT-W2, page 1. Details of Staff's adjustments are discussed below.

Plant in Service

Staff has no plant in service adjustment

OTHER RATE BASE ITEMS

Accumulated Depreciation

Adjustment A increases accumulated depreciation by \$100,448, from \$385,341 to \$485,789, as shown on Schedule PNT-W2, pages 1 and 3. The significant portion of Staff's increase to accumulated depreciation was the result of Staff's adjustments to depreciation rates. Staff used a depreciation rate of 5.00 percent for all depreciable plant. No specific depreciation rates were assigned in previous rate case in 1985; at that time, 5 percent was standard depreciation rate for all depreciable plants. The Company used a depreciation rate of 3.33 percent for most of the plant. Staff's adjusted account reflects the \$38,405 balance established in Decision No. 54777.

Amortization of CIAC

Adjustment B increases amortization of CIAC by 84,407, from \$168,309 to \$252,716, as shown on Schedule PNT-W2, pages 1 and 4. The significant portion of Staff's increase to amortization of CIAC was the result of Staff's adjustments to amortization rates. Staff used a composite rate of 5.00 percent. The Company used a composite rate of 3.33 percent.

Working Capital

Staff's adjustment to cash working capital resulted in a net increase of \$7,255, from \$0 to \$7,255, as shown on Schedule PNT-W2, pages 1 and 4.

Cash working capital was calculated by using the formula method which equals one-eighth of the operating expenses less depreciation, taxes, purchased water and purchased power expenses, plus one twenty-fourth of purchased water and purchased power expenses.

OPERATING INCOME STATEMENT

Operating Revenue

Staff did not make any adjustments to Operating Revenue.

Operating Expenses

Staff's adjustments to operating expenses resulted in a net decrease of \$7,820, from \$74,926 to \$67,106, as shown on Schedule PNT-W3, page 1. Details of Staff's adjustments are presented below.

Water Testing – Adjustment "1" increases water testing expense by \$372, from \$845 to \$1,217 as shown on Schedule PNT-W3, pages 1 and 2. This adjustment reflects the annual water testing costs determined in the attached Engineering Report.

Insurance Expense – Adjustment "2" decreases insurance expense by \$619, from \$12,957 to \$12,338, as shown on Schedule PNT-W3, pages 1 and 2. This amount reflects Staff's calculation of insurance expense based on supporting documentation and reallocation of costs. Insurance expense was shared among Greenehaven Development Company, Greenehaven Water Company and Greenehaven Sewer Company. Greenehaven Development Company shared one-third of the expense; the rest of the amount was allocated to Greenehaven Water and Sewer using a four-factor cost allocation methodology. The four factors are: Operating Revenue, Number of Connections, Net Plant, and Purchased power. Allocation percentage to Greenehaven Water is 43.62 percent.

Rate Case Expense – Adjustment "3" decreases annual rate case expense by \$4,000, from \$8,000 to \$4,000, as shown on Schedule PNT-W3, pages 1 and 2. This adjustment reflects a normalized amount of rate case expense based on a five year normalization period for a \$20,000 rate case expense.

<u>Depreciation Expense</u> – Adjustment "4" decreases depreciation expense by \$4,281, from \$5,341 to \$1,060, as shown on Schedule PNT-W3, pages 1 and 3. Staff's depreciation expense reflects application of Staff's recommended depreciation rates to Staff's recommended plant balances.

<u>Income Taxes</u> – Adjustment "5" increases income taxes by \$708, from negative \$3,894 to negative \$3,186, as shown on Schedule PNT-W3, pages 1, 4 and 6. This adjustment reflects Staff's calculation of income taxes based on Staff's adjustments to operating revenue and expenses.

Operating Margin

The Company's proposed rates and charges would provide an operating income of \$20,074

for an operating margin of 19.22 percent.

Staff's recommended rates and charges would provide an operating income of \$10,274 for an operating margin of 12.31 percent.

REVENUE REQUIREMENT

Staff recommends total operating revenue of \$83,486, an increase of \$29,046, or 53.35 percent, over test year revenue of \$54,440. Staff determined that the Company's rate base was too small to produce enough income for normal operations. Further, Staff determined that cash flow should be used to set the revenue requirement. Staff's recommended rates and charges would provide an operating income of \$10,274 and would yield a cash flow of \$11,334.

Staff's total revenue requirement of \$83,486 provides the Company with sufficient cash flow to pay operating expenses and contingencies.

RATE DESIGN

Schedule PNT-W5, pages 1 and 2, presents a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,934 gallons from \$11.90 to \$20.71, for an increase of \$8.81, or 74.00 percent.

Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 2,934 gallons from \$11.90 to \$12.93, for an increase of \$1.03, or 8.68 percent.

MISCELLANEOUS SERVICE CHARGES

The Company proposed new charges for its current service charges. Staff concurs with the Company's proposed service charges except for the Non-Sufficient Funds ("NSF") Check fee. The Company is requesting \$30.00, but Staff believes \$25.00 is a more appropriate amount which would include one NSF fee when customers are billed for water and sewer services on one bill..

SERVICE LINE AND METER INSTALLATION CHARGES

The Company proposed new charges for its current service line and meter installation charges. Staff concurs with the Company's proposed service charges but recommends separating the service line charge from the meter installation charge as reflected on Schedule PNT-W5, page 2 of 2.

STAFF RECOMMENDATIONS

Staff recommends:

- 1. Approval of its recommended rates and charges as shown in Schedule PNT-W5.
- 2. That the Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
- 3. That the Company use the depreciation rates presented in Table C of the attached Engineering Report.
- 4. That the Company be ordered to keep invoices for each plant asset purchase in the future.
- 5. The Company use a 4-factor allocation to charge indirect costs.
- 6. Lost water for Greenehaven Water was calculated to be 15.85 percent in 2013 which exceeds acceptable limits. Staff recommends that Greenehaven Water monitor the water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meter each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent, the Company shall prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.
- 7. That Greenehaven Water file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at http://www.azcc.gov/Divisions/Utilities/forms.asp. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

8. That Greenehaven Water post a sign at its well and tank site which meets the following. The sign should comply with Arizona Department of Environmental Quality ("ADEQ") requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s). Staff further recommends that the Company file documentation with Docket Control demonstrating compliance within forty-five (45) days of the effective date of the Commission Decision in this matter.

Schedule PNT-W1

SUMMARY OF FILING

Present Rates		Proposed I			Rates		
	Company		Staff		Company		Staff
	as		as		as		as
	Filed		Adjusted		Filed		Adjusted
\$	54,440	\$	54,440	\$	104,440	\$	83,486
	-		-		-		
	-		· <u>-</u>		-		
\$	54,440	\$	54,440	\$	104,440	\$	83,486
\$	71,595	\$	67,348	\$	71,595	\$	67,348
	5,341		1,060		5,341		1,060
	1,884		1,884		3,615		2,220
ľ	(3,894)		(3,186)		3,815		2,585
\$	74,926	\$	67,106	\$	84,366	\$	73,212
\$	(20,486)	\$	(12,666)	\$	20,074	\$	10,274
\$	23,277	\$	14,491	\$	23,277	\$	14,491
	NT /NT		NT/NE		07.040/		70.000/
	N/M		IN / IMI		80.24%		70.90%
	N/M		N/M		19 22%		12.31%
	14/141		14/141		17.22/0		12.51/0
				\$	25,415	\$	11,334
	\$	\$ 54,440 \$ 54,440 \$ 54,440 \$ 71,595 5,341 1,884 (3,894) \$ 74,926 \$ (20,486)	Company as Filed \$ 54,440 \$ \$ 54,440 \$ \$ 71,595 \$ 5,341 1,884 (3,894) \$ 74,926 \$ \$ (20,486) \$ \$ N/M	Company Staff as as Filed Adjusted \$ 54,440 \$ 54,440 \$ 71,595 \$ 67,348 5,341 1,060 1,884 1,884 (3,894) (3,186) \$ 74,926 \$ 67,106 \$ (20,486) \$ (12,666) \$ 23,277 \$ 14,491 N/M N/M	Company Staff as as Filed Adjusted \$ 54,440 \$ 54,440 \$ \$ \$ 54,440 \$ 54,440 \$ \$ \$ 71,595 \$ 67,348 \$ \$ 5,341 1,060 1,884 1,884 (3,894) (3,186) \$ \$ 74,926 \$ 67,106 \$ \$ \$ (20,486) \$ (12,666) \$ \$ \$ N/M N/M N/M N/M N/M N/M N/M N/M	Company as Filed Staff Adjusted Company as Filed \$ 54,440 \$ 104,440 \$ 54,440 \$ 104,440 \$ 54,440 \$ 104,440 \$ 54,440 \$ 104,440 \$ 71,595 \$ 67,348 \$ 71,595 \$ 5,341 1,060 5,341 1,884 1,884 3,615 (3,894) (3,186) 3,815 \$ 74,926 \$ 67,106 \$ 84,366 \$ (20,486) \$ (12,666) \$ 20,074 \$ 23,277 \$ 14,491 \$ 23,277 N/M N/M 86.24% N/M N/M 19.22%	Company as as Filed Staff Adjusted Company as Filed \$ 54,440 \$ 54,440 \$ 104,440 \$

R	ATE	BASE				
Original Cost						
		Company	A	djustment		 Staff
Plant in Service	\$	842,876	\$	_ ·		\$ 842,876
Less:						
Accum. Depreciation		385,341		100,448	<u>A</u>	 485,789
Net Plant	\$	457,535	\$	(100,448)		\$ 357,087
Less:						
Plant Advances	\$	-	\$	<u></u>		
Service Line and Meter Advances				<u> </u>		
Total Advances		_		_		-
Contributions Gross Less:		602,567		-		602,567
Amortization of CIAC		168,309		84,407	В	252,716
Net CIAC		434,258		(84,407)		 349,851
Total Deductions	\$	434,258	\$	(84,407)		\$ 349,851
Plus:						
1/24 Power & Water	\$	-	\$	582	3	\$ 582
1/8 Operation & Maint.		-		6,673 D)	6,673
Total Additions	\$	-	\$	7,255		\$ 7,255
Rate Base	\$	23,277	\$	(8,786)		\$ 14,491

Explanation of Adjustment:

- A Refer to Schedule PNT-W2, Page 2
- B Refer to Schedule PNT-W2, Page 3
- C Refer to Schedule PNT-W2, Page 3
- D- Refer to Schedule PNT-W2, Page 3

PLANT IN SERVICE

LINE			Plant In Service			lant In Service
NO.	DESCRIPTION	I	Per Company	Adjusti	ments	er Staff
1	301 - Organization Cost	\$	-	\$	_	\$ -
2	302 - Franchise Cost		· _		-	
3	303 - Land and Land Rights		890		-	890
4	304 - Structures and Improvements		-		-	-
5	307 - Wells & Spring		18,932			18,932
6	311 - Electric Pumping Equipment		30,529		-	30,529
7	320 - Water Treatment Equipment		-		_	
11	320.1 Water Treatment Plants		-		-	_
12	320.2 Solution Chemical Feeders		-		-	
13	330 - Distribution Reservoirs & Standpipe		· - .		-	-
14	330.1 Storage Tanks		58,944		-	58,944
15	330.2 Pressure Tanks				-	
16	331 - Transmission & Distr. Mains		490,308		_	490,308
17	333 - Services		118,781		-	118,781
18	334 - Meter & Meter Installations		3,256		-	3,256
19	335 - Hydrants		120,546			120,546
20	336 - Backflow Prevention Devices		-		-	
21	339 - Other Plant & Misc Equipment		-		-	-
22	340 - Office Furniture and Fixtures		-		-	_
23	340.1 Computers and Software				-	-
24	341 - Transportation Equipment		-		-	·
25	343 - Tools & Work Equipment		- .			-
26	344- Laboratory Equipment					-
27	345 - Power Operated Equipment		690		-	690
28	346 - Communication Equipment		-		-	-
30	347 - Miscellaneous Equipment					 ·_
33	Total Plant	\$	842,876	\$	· _	\$ 842,876

ACCUMULATED DEPRECIATION ADJUSTMENT

A- Accumulated Depreciation - Per Compnay Per Staff \$ 385,341 485,789 \$ 100,448

ACCT	ACCUMULATED DEPRECIATION							
	Company	Staff	Staff					
No. Description	Application	<u>Adjustment</u>	<u>Calculated</u>					
301 Intangibles/Organization	\$ -	\$	\$ -					
302 Franchises	-	-	• -					
303 Land & Land Rights	. · · · · -	2	-					
304 Structures & Improvements	·	,						
307 Wells & Springs	18,932	-	18,932					
311 Electrical Pumping Equipment	17,634	7,871	25,505					
320.1 Water Treatment Plant	-	-	_					
320.2 Solution Chemical Feeder	-	-						
330 Distribution Reservoirs & Standpipes	·	- .	-					
330.1 Storage Tanks	58,944	-	58,944					
330.2 Pressure Tanks	<u> </u>	· <u>-</u>	-					
331 Transmission & Distribution Mains	219,693	58,911	278,604					
333 Services	32,543	16,320	48,863					
334 Meters & Meter Installations	2,404	-	2,404					
335 Hydrants	34,587	17,346	51,933					
336 Backflow Prevention Devices	· -	-	-					
339 Other Plant and Misc. Equipment	-	-	-					
340 Office Furniture & Equipment	-	-	-					
340.1 Computer & Software	-	-	_					
341 Transportation Equipment	-	- · ·	· -					
343 Tools Shop & Garage Equipment	_							
344 Laboratory Equipment	-	- .	-					
345 Power Operated Equipment	604		604					
346 Communication Equipment	-							
347 Miscellaneous Equipment	-	_ .	-					
348 Other Tangible Plant		<u> </u>						
	\$ 385,341	\$ 100,448	\$ 485,789					

STAFF PLANT ADJUSTMENTS		
B- AMORTIZATION OF CIAC- Per Company Per Staff	\$ 168,309 252,716	\$ 84,407
To reflect Staff's adjuested amortization of CIAC with an composite rate of 5.00%.		:
C - WORKING CAPITAL(1/24 Power & Water. Portion of cash		
working capital formula method)- Per Company Per Staff	\$ - 582	\$ 582
To reflect Staff's calculation of cash working capital based on		
Staff's recommendations for purchased power and purchased water expense.		
D - WORKING CAPITAL (1/8 operation & Maint exp. Portion of cash		
working capital formula method)- Per company Per Staff	\$ - 6,673	\$ 6,673

To reflect Staff's calculation of cash working capital based on Staff's recommendations for operation and maintenance expense (excluding purchased power and purchased water expenses).

STATEMENT OF OPERATING INCOME

		ompany Exhibit	Ad	Staff justments		A	Staff djusted
Revenues:				· · · · · · · · · · · · · · · · · · ·			
461 Metered Water Revenue	\$	54,440	\$	-		\$	54,440
460 Unmetered Water Revenue		-		-			-
474 Other Water Revenues		-		<u> </u>			· -
Total Operating Revenue	\$	54,440	\$	<u>-</u>		\$	54,440
Operating Expenses:							
601 Salaries and Wages	\$	27,075	\$	_		\$	27,075
610 Purchased Water		-		-			_
615 Purchased Power		13,963		- -			13,963
618 Chemicals		-		-			-
620 Repairs and Maintenance		4,936		-			4,936
621 Office Supplies & Expense		791		-			791
630 Outside Services				-			-
635 Water Testing		845		372	1		1,217
641 Rents		-		-			-
650 Transportation Expenses		2,338		- '			2,338
657 Insurance - General Liability		12,957		(619)	2		12,338
666 Regulatory Commisssion Expense - Rate Case		8,000		(4,000)	3		4,000
675 Miscellaneous Expense		690		-			690
403 Depreciation Expense		5,341		(4,281)	4		1,060
408 Taxes Other Than Income		-		-			-
408.11 Property Taxes		1,884		-			1,884
409 Income Tax	***	(3,894)		708	5		(3,186)
Total Operating Expenses	_\$	74,926	\$	(7,820)		\$	67,106
OPERATING INCOME/(LOSS)	\$	(20,486)				\$	(12,666)

	STAFF ADJUSTMENTS		 	
1 -	WATER TESTING-Per Company Per Staff		 \$845 1,217	\$372
	To reflect Staff Engineering adjusted water testing expense.			
2 -	INSURANCE-GENERAL LIABILITY- Per Company Per Staff		\$ 12,957 12,338	(619)
	To reflect Staff's calculation of the allocated portion of the insurance expense using Staff's four-factor allocation methology.			
	Calculation of Insurance Expense Allocated Shared Expense Non-Allocable Direct Expense Total Insurance Expense \$	11,007 1,331 12,338		
	Total Insurance Expense (Application) Disallowance of Life insurance Amount Before allocation	- ,	\$ 38,375 (522) 37,853	
	Allocation percentage for Greenehaven Development Annual shared insurance for Greenehaven Development Company Annual shared insurance for Greenehaven Water and Sewer	33.33%	12,618 25,235	
	Allocation percentage for Greenehaven Water Total Insurance Expense for Greenehaven Water		\$ 43.62%	
3 -	REGULATORY COMMISSION EXPENSE (Rate Case) - Per Company Per Staff		\$8,000 4,000	(\$4,000)

To reflect a reasonable normalized amount of rate case expense based on five years between rate cases.

\$ 20,000 Rate Case Expense
 5 Divided by 5 years
\$ 4,000 Annual Rate Case Expense

Calculation of Four-Factor Allocation							
	[A]	[B]	[C]	[D]	[E]	[A]	
	Operating	Purchased	Number of	Net	Total	Allocation %	
	Revenue	Power	Connections	Plant	(Col A+B+C+D)	(Col E / 4)	
Greenehaven Water	57.33%	44.05%	56.01%	17.08%	174%	43.62%	
Greenehaven Sewer	42.67%	55.95%	43.99%	82.92%	226%	56.38%	

Operating Revenue

Water	Sewer	Total
54,440	40,519	94,959
57.33%	42.67%	100.00%

Number of Connections

Water	Sewer	Total		
 401	315	716		
56.01%	43.99%	100.00%		

Net Plant

Water	Sewer	Total
357,087	1,733,922	2,091,009
17.08%	82.92%	100.00%

Purchased Power

Water	Sewer	Total		
13,963	17,733	31,696		
44.05%	55.95%	100.00%		

4 -

STAFF ADJUSTMENTS (Cont.)

DEPRECIATION - Per Company Per Staff

\$5,341 1,060

(\$4,281)

To reflect application of Staff's recommended depreciation rates to Staff's recommended plant, by account

Pro Forma Annual Depreciation Expense:

	Pro Forma Annual Depr	eciation Expense	:					
		[A]	[B]	[C]	[D]	[E]	[F]	[G]
		Plant In	Non-Depreciable	Depreciable		Depreciation		CLAC
LINE		Service	or Fully Depreciated	Plant	Depreciation	Expense	CIAC	Amort.
NO.	DESCRIPTION	Per Staff	Plant	(Col A - Col B)	Rate	(Col C x Col D)	Plant	(Col Fx Col D)
1	301 - Organization Cost	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -
2	302 - Franchise Cost	· -		-		-	-	-
-3	303 - Land and Land Rights	890.0	890	-		_	-	-
4	304 - Structures and Improvements	-	-		3.33%	\$ -	-	
5	307 - Wells & Spring	18,932.0	18,932	-	3.33%	-		-
6	311 - Electric Pumping Equipment	30,529.0	23,600	6,929	12.50%	866	-	-
7	320 - Water Treatment Equipment	-	-	-		-	-	-
11	320.1 Water Treatment Plants	-	·	-	3.33%		-	-
12	320.2 Solution Chemical Feeders	-		-	20.00%		-	_
13	330 - Distribution Reservoirs & Standpipe	-	-	- 1		-		
14	330.1 Storage Tanks	58,944	58,944	-	2.22%	-	-	· · · -
15	330.2 Pressure Tanks		-	- '	5.00%		-	-
16	331 - Transmission & Distr. Mains	490,308	123,994	366,314	2.00%	7,326	366,314	7,326
17	333 - Services	118,781	-	118,781	3.33%	3,955	118,781	3,955
18	334 - Meter & Meter Installations	3,256	2,081	1,175	8.33%	98	-	´-
19	335 - Hydrants	120,546	-	120,546	2.00%	2,411	117,472	2,349
20	336 - Backflow Prevention Devices		-	-	6.67%	-		
21	339 - Other Plant & Misc Equipment	_	-	-	6.67%		-	
22	340 - Office Furniture and Fixtures	- · · · -		-	6.67%	-		-
23	340.1 Computers and Software	-	-	-	20.00%	-	· _	-
24	341 - Transportation Equipment	-	-		20.00%	=	-	-
25	343 - Tools & Work Equipment	-	-	_	5.00%	-	-	-
26	344- Laboratory Equipment	· ·	-	-	10.00%	-	-	-
27	345 - Power Operated Equipment	690	-	690	5.00%	35		-
28	346 - Communication Equipment	-	-	-	10.00%	-	-	-
30	347 - Miscellaneous Equipment				10.00%			-
33	Total Plant	\$ 842,876	\$ 228,441	\$ 614,435		\$ 14,691	\$ 602,567	\$ 13,631
37		,	· · · · · · · · · · · · · · · · · · ·	•		,	,,	•,
38	Pro Forma Annual Depreciation Expense							
39	•							
40	Plant in Service					\$ 842,876		
41	Less: Non Depreciable Plant					890		
42	Fully Degraciable Diant					007.554		

38	Pro Forma Annual Depreciation Expense		
39			
40	Plant in Service	\$	842,876
41	Less: Non Depreciable Plant		890
42	Fully Depreciable Plant		227,551
43	Depreciable Plant	*******	\$614,435
44	Depreciation Expense Before Amortization of CIAC:	\$	14,691
45	Less Amortization of CIAC:		13,631
46	Test Year Depreciation Expense - Staff:	\$	1,060
47	Depreciation Expense - Company:		5,341
48	Staff's Total Adjustment:	\$	(4,281)

Greenehaven Water Company, Inc. Docket No. W-02325A-14-0322 Test Year Ended: Dcember 31, 2013

Schedule PNT-W3
Page 4 of 6

STAFF ADJUSTMENTS

5 - INCOME TAXES-Per Company Per Staff (\$3,894) (3,186)

\$708

To reflect Staff's calculation of income tax expense. (Schedule PNT-W3, Page 6 of 6)

PROPERTY TAX CALCULATION

[B]

LINE		T	STAFF		STAFF
NO.	Property Tax Calculation	AS A	ADJUSTED	RECOM	MENDED
1	Staff Adjusted Test Year Revenues	\$	54,440	\$	54,440
. 2	Weight Factor		2		2
. 3	Subtotal (Line 1 * Line 2)	\$	108,880	\$	108,880
4	Staff Recommended Revenue, Per Schedule PNT-W1		54,440		83,486
5	Subtotal (Line 4 + Line 5)	\$	163,320	\$	192,366
6	Number of Years		3		3
7	Three Year Average (Line 5 / Line 6)	\$	54,440	\$	64,122
- 8	Department of Revenue Multiplier		2		2
9	Revenue Base Value (Line 7 * Line 8)	\$	108,880	\$	128,244
10	Plus: 10% of CWIP -		·		-
11	Less: Net Book Value of Licensed Vehicles		_		-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$	108,880	\$	128,244
13	Assessment Ratio		18.5%		18.5%
14	Assessment Value (Line 12 * Line 13)		20,143	\$	23,725
15	Composite Property Tax Rate		9.355%		9.355%
16	Staff Proposed Property Tax Expense (Line 14 * Line 15)	\$	1,884		
17	Company Proposed Property Tax		1,884		
18	Staff Test Year Adjustment (Line 16-Line 17)	\$	0		
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)			\$	2,220
20	Staff Test Year Adjusted Property Tax Expense (Line 16)			Ħ	1,884
21	Increase/(Decrease) to Property Tax Expense				335
22	Decrees to Broposty Tay Europea			at a	225
	Decrease to Property Tax Expense			*	335
23	Increase in Revenue Requirement				29,046
24	Decrease to Property Tax per Dollar Increase in Revenue (Line19/Line 20)				1.15%

GROSS REVENUE CONVERSION FACTOR

DESCRIPTION	LINE		(A)	(B) .	(C)	(D)
Billings	NO.	DESCRIPTION				
Uncollecable Factor		Calculation of Gross Revenue Conversion Factor.				
A Leas Combined Federal, State & Property Tax Rate (Line 12)	1	Billings	1.000000			
A Least Combined Federal, State & Property Tax Rate (Line 12)	2		0.000000			
Subtroat [J.3 - J.4]	3	Revenues				
Subtroat [J.3 - J.4]	4	Less: Combined Federal, State & Property Tax Rate (Line 12)				
Calination of Effetive Tax Rate	5					
A contained Company	6		1.266174			
A contained Company						
Arizona State Income Tax Rate Federal Taxable Income (1.7 - 1.8) Federal Taxable Income (1.7 - 1.8) Applicable Federal Income Tax Rate (Line 36) Effective Federal Income Tax Rate (Line 36) Columbian of Efficial Property Tax Rate Unity Combined Federal & State Income Tax Rate Unity Combined Federal & State Income Tax Rate Unity Froperty Tax Factor Effective Property Tax Rate Combined Federal & State Income Tax Rate Froperty Tax Factor Effective Property Tax Rate Combined Federal, State Income & Property Tax Rate Equired Operating Income (Lone) Schedule PNT-W3, Page 1 of 6) Required Operating Income (Lone) Schedule PNT-W3, Page 1 of 6) Required Increase in Operating Income (Lone) Schedule PNT-W3, Page 1 of 6) Required Increase in Operating Income (Lone) Schedule PNT-W3, Page 5 of 6, Col B, \$ 2,293 Income Taxes on Recommended Revenue (Col. (D), L40) Required Increase in Revenue to Provide for Income Taxes (L21-L22) Property Tax with Recommended Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Income Taxes on Test Year Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Income Taxes on Test Year Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Income Taxes on Test Year Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Income Taxes on Test Year Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Income Taxe Income Tax Taxe to Increase in Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Income Taxe Income Taxe Taxe Income Taxes (L21-L22) Application of Taxe Taxe Income Taxe Income Taxes (L21-L22) Application of Taxe Taxe Income Taxes (L21-L22) Application of Taxes (L21-L22) Application of Taxes		Calculation of Effective Tax Rate:				
Federal Taxable Income (1.7 - 1.8)	7	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
Applicable Federal Income Tax Rate (Jin a 36)	8	Arizona State Income Tax Rate	6.0000%			
Effective Federal Income Tax Rate (L9 x L10)	9	Federal Taxable Income (L7 - L8)	94.0000%			
Effective Federal Income Tax Rate (L9 x L10)	10					
Combined Federal and State Income Tax Rate (L8 + L11)		t t				
Calisalation of Efficitive Property Tax Rate 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.00000% 100.00000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.0000% 100.00000% 100.00000% 100.00000% 100.00000% 100.00000% 100.00000% 100.00000% 100.000000% 100.000000% 100.000000000% 100.000000000000000000000000000000000		· · · · · · · · · · · · · · · · · · ·		20.1000%		
100,0000% 100,00000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,0000% 100,00000% 100,00000% 100,00000% 100,00000% 100,000000% 100,000000% 100,000000% 100,000000000000000000000000000000000						
Combined Federal & State Income Tax Rate		Calculation of Effective Property Tax Rate:				
15 One Minus Combined Income Tax Rate 79,90000% 1.15380% 1.15380% 21,0219%	13	Unity	100.0000%			
Property Tax Factor Effective Property Tax Rate 0.00921883 21.0219%	14	Combined Federal & State Income Tax Rate	20.1000%			
Effective Property Tax Rate	15	One Minus Combined Income Tax Rate	79.90000%			
Combined Federal, State Income & Property Tax Rate	16	Property Tax Factor	1.15380%			
Required Operating Income (Schedule PNT-W1)	17	Effective Property Tax Rate		0.00921883		
Adjusted Test Year Operating Income (Loss) (Schedule PNT-W3, Page 1 of 6) Required Increase in Operating Income (L18 - L19) Income Taxes on Recommended Revenue (Col. (D), L40) Required Increase in Revenue (Col. (B), L40) Required Increase in Revenue (Col. (B), L40) Required Increase in Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Required Increase in Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Property Tax with Recommended Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Increase in Property Tax Due to Increase in Revenue (L25-L26) Increase in Property Tax Due to Increase in Revenue (L25-L26) Total Required increased in Revenue (L20+L23+L26) Revenue (Schedule PNT-W3, page 1 of 6) Less: Operating Expenses Excluding Income Taxes Recommeded Less: Operating Expenses Excluding Income Taxes Less: Synchronized Interest (L44) Arizona Taxable Income (L27 - L28 - L29) Arizona Taxable Income (L27 - L28 - L29) Arizona State Income Tax Rate Arizona State Income (L30 - L32) Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% Federal Tax on First Income Bracket (\$1 - \$50,000) @ 25% Federal Tax on First Income Bracket (\$1,001 - \$735,000) @ 25% Federal Tax on First Income Bracket (\$1,001 - \$735,000) @ 39% Federal Tax on First Income Bracket (\$35,001 - \$10,000,000) @ 34% Total Federal Tax on Fourth Income Bracket (\$35,001 - \$10,000,000) @ 34% Total Federal Income Tax Combined Federal and State Income Tax (L32 + L39, Col. B) And Combined Federal Income Tax Combined Federal Income Tax Combined Federal Income Tax (L32 + L39, Col. B)		Combined Federal, State Income & Property Tax Rate		21.0219%		
Adjusted Test Year Operating Income (Loss) (Schedule PNT-W3, Page 1 of 6) Required Increase in Operating Income (L18 - L19) Income Taxes on Recommended Revenue (Col. (D), L40) Required Increase in Revenue (Col. (B), L40) Required Increase in Revenue (Col. (B), L40) Required Increase in Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Required Increase in Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Property Tax with Recommended Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220 Increase in Property Tax Due to Increase in Revenue (L25-L26) Increase in Property Tax Due to Increase in Revenue (L25-L26) Total Required increased in Revenue (L20+L23+L26) Revenue (Schedule PNT-W3, page 1 of 6) Less: Operating Expenses Excluding Income Taxes Recommeded Less: Operating Expenses Excluding Income Taxes Less: Synchronized Interest (L44) Arizona Taxable Income (L27 - L28 - L29) Arizona Taxable Income (L27 - L28 - L29) Arizona State Income Tax Rate Arizona State Income (L30 - L32) Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% Federal Tax on First Income Bracket (\$1 - \$50,000) @ 25% Federal Tax on First Income Bracket (\$1,001 - \$735,000) @ 25% Federal Tax on First Income Bracket (\$1,001 - \$735,000) @ 39% Federal Tax on First Income Bracket (\$35,001 - \$10,000,000) @ 34% Total Federal Tax on Fourth Income Bracket (\$35,001 - \$10,000,000) @ 34% Total Federal Income Tax Combined Federal and State Income Tax (L32 + L39, Col. B) And Combined Federal Income Tax Combined Federal Income Tax Combined Federal Income Tax (L32 + L39, Col. B)	18	Required Operating Income (Schedule PNT-W/1)	\$ 10.274			
Required Increase in Operating Income (L18 - L19) \$ 22,939		, ,	•			
Income Taxes on Test Year Revenue (Col. (B), L40)			(12,000)	\$ 22,939		
Income Taxes on Test Year Revenue (Col. (B), L40)	01	Town T. (C. 1.70) I. (6)	# 0.505			
Required Increase in Revenue to Provide for Income Taxes (I.21 - I.22) \$ 5,771						
Property Tax with Recommended Revenue (Schedule PNT-W3, page 5 of 6, Col B, \$ 2,220			(3,186)	e		
Property Tax on Test Year Revenue (Schedule PNT-W3, page 5 of 6, Col A, L16) 1,884	23	required increase in revenue to Provide for income Taxes (L21-L22)		3 5,//I		
Property Tax on Test Year Revenue (Schedule PNT-W3, page 5 of 6, Col A, L16) 1,884						
Increase in Property Tax Due to Increase in Revenue (L.25-L.26) \$ 335 \$ 29,045 \$ 100						
Total Required increased in Revenue(L20+L23+L26) Staff			1,884			
Staff Calculation of Income Tax: Test Year Recommeded Revenue (Schedule PNT-W3, Page 1 of 6) \$ 54,440 \$ 83,486 \$ 83,486 \$ 28 Less: Operating Expenses Excluding Income Taxes 70,292 70,627 \$ 12,858 \$ 12,85	26			\$ 335		
Calculation of Income Tax; Test Year Recommeded 27 Revenue (Schedule PNT-W3, Page 1 of 6) \$ 54,440 \$ 83,486 28 Less: Operating Expenses Excluding Income Taxes 70,292 70,627 29 Less: Synchronized Interest (L44) ————————————————————————————————————		Total Required increased in Revenue(L20+L23+L26)		\$ 29,045	Staff	
28 Less: Operating Expenses Excluding Income Taxes 70,292 70,627 29 Less: Synchronized Interest (L44) - - 30 Arizona Taxable Income (L27 - L28 - L29) \$ (15,852) 12,858 31 Arizona State Income Tax Rate 6.000% 6.000% 32 Arizona Income Tax (L30 x L31) \$ (951) \$ 772 33 Federal Taxable Income (L30 - L32) \$ (14,901) \$ 12,087 34 Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% \$ (2,235) \$ 1,813 35 Federal Tax on Second Income Bracket (\$75,001 - \$75,000) @ 25% - - - 36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585		Calculation of Income Tax:	Test Year			
28 Less: Operating Expenses Excluding Income Taxes 70,292 70,627 29 Less: Synchronized Interest (L44) - - 30 Arizona Taxable Income (L27 - L28 - L29) \$ (15,852) 12,858 31 Arizona State Income Tax Rate 6.000% 6.000% 32 Arizona Income Tax (L30 x L31) \$ (951) \$ 772 33 Federal Taxable Income (L30 - L32) \$ (14,901) \$ 12,087 34 Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% \$ (2,235) \$ 1,813 35 Federal Tax on Second Income Bracket (\$75,001 - \$75,000) @ 25% - - - 36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585	27	Revenue (Schedule PNT-W3, Page 1 of 6)	\$ 54,440		\$ 83,486	
Less: Synchronized Interest (L44)	28	,				
30 Arizona Taxable Income (L27 - L28 - L29) \$ (15,852) 12,858 31 Arizona State Income Tax Rate 6.000% 6.000% 5 32 Arizona Income Tax (L30 x L31) \$ (951) \$ 772 33 Federal Taxable Income (L30 - L32) \$ (14,901) \$ 12,087 34 Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% \$ (2,235) \$ 1,813 35 Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	29		_			
32 Arizona Income Tax (L30 x L31) \$ (951) \$ 772 33 Federal Taxable Income (L30 - L32) \$ (14,901) \$ 12,087 34 Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% \$ (2,235) \$ 1,813 35 Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% - - 36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585			\$ (15,852)		12,858	
32 Arizona Income Tax (L30 x L31) \$ (951) \$ 772 33 Federal Taxable Income (L30 - L32) \$ (14,901) \$ 12,087 34 Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% \$ (2,235) \$ 1,813 35 Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% - - 36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585	31	Arizona State Income Tay Rate	6.000%		6.000%	
33 Federal Taxable Income (L30 - L32) \$ (14,901) \$ 12,087 34 Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% \$ (2,235) \$ 1,813 35 Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% - - 36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585			0.00070	\$ /051\		770
34 Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% \$ (2,235) \$ 1,813 35 Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% - - 36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585			\$ (14 001)	a (331)		112
35 Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% - - - 36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585						
36 Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% - - 37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% - - 38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - - 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585			w (2,433)		φ 1,01 <i>3</i>	
37 Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% -		, , , , , , , , , , , , , , , , , , ,			-	
38 Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% - (2,235) 1,813 39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585		\" , , , , , , , , , , , , , , , , , , ,	-		-	
39 Total Federal Income Tax (2,235) 1,813 40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585		(, , , , , , , , , , , , , , , , , , ,			-	
40 Combined Federal and State Income Tax (L32 + L39, Col. B) \$ (3,186) \$ 2,585		• • • • • • • • • • • • • • • • • • • •	-	(0.005)	=	1.012
41 Applicable Federal Income Tax Rate [Col. (D), L39 - Col. (B), L39] / [Col. (C), L33 - Col. (A), L33] 15.0000%				, (5,100)	*	2,505
	41	Applicable Federal Income Tax Rate [Col. (D), L39 - Col. (B), L39] / [Col. (C), L33	- Col. (A), I.33]		. 1	5.0000%

Cash Flow Analysis

Line		. <u>.</u>	Comp	any Proposed	<u>.</u>	Staff R	<u>Recommended</u>
<u>No.</u>			-				
1	Operating Revenue:			\$104,440		\$	83,486
2	Operating Expenses:						
3	Operation and Maintenance			71,595			67,348
4	Depreciation			5,341			1,060
5	Property & Other Taxes			3,615			2,220
6	Income Tax			3,815			2,585
7	Total Operating Expense		\$	84,366		\$	73,212
8							
9	Operating Income			\$20,074		\$	10,274
10							
11	Interest Expense		\$	_		\$	_
12							
13	Principal Repayment		\$			\$	· -
14							
15	Refunds of Advances in Aid		\$	-		\$	_
16							
17	Cash Flow: (L9+L4-L11-L13-15)		\$	25,415		\$	11,334
18							

RATE DESIGN

		Company	Staff
Monthly Usage Charge	Present	Proposed Rates	Recommended Rates
Meter Size (Residential and Commercial)			
5/8 x 3/4 Inch	\$9 For 1,000 Gallons	\$ 16.57	\$ 10.00
3/4 Inch	N/A	24.86	15.00
1 Inch	N/A	41.43	25.00
1 1/2 Inch	N/A	82.85	50.00
2 Inch	N/A	132.56	80.00
3 Inch	N/A	165.12	160.00
4 Inch	N/A	414.25	250.00
6 Inch	N/A	828.50	500.00
Turissains			
Irrigation	NT/A	16.57	\$ 5.00
5/8 x 3/4 Inch	N/A	16.57	
3/4 Inch	N/A	24.86	7.50
1 Inch	N/A	41.43	12.50
1 1/2 Inch	N/A	82.85	25.00
2 Inch	N/A	132.56	40.00
3 Inch	N/A	165.12	80.00
4 Inch	N/A	414.25	125.00
6 Inch	N/A	828.50	250.00
Commodity Charge - Per 1,000 Gallons			
Flat Rate	1.50	N/A	N/A
All meter sizes and customers (All Classes)			
	NT/A	¢ 1.41	NT/A
First 3,000 gallons	N/A	\$ 1.41	N/A
3,001 to 9,000 gallons	N/A	2.12	N/A
Over 9,000 gallons	N/A	2.54	N/A
5/8 Inch Meter (Residential and Commercial)			
First 3,000 gallons	N/A	N/A	1.00
3,001 to 9,000 gallons	N/A	N/A	2.40
Over 9,000 gallons	N/A	N/A	3.50
1" Meter (Residential and Commercial)			
First 15,000 gallons	N/A	N/A	\$ 2.40
Over 15,000 gallons	N/A	N/A	3.50
1 1/2" Meter (Residential and Commercial)			
First 30,000 gallons	N/A	N/A	2.40
Over 30,000 gallons	N/A	N/A	3.50
2" Meter (Residential and Commercial)			
First 50,000 gallons	N/A	N/A	2.40
Over 50,000 gallons	N/A	N/A	3.50
allate militaria de la companio			
3" Meter (Residential and Commercial)	." XT/A	NT / 4	2.10
First 100,000 gallons	N/A	N/A	2.40
Over 100,000 gallons	N/A	N/A	3.50
4" Meter (Residential and Commercial)			
First 150,000 gallons	N/A	N/A	2.40
Over 150,000 gallons	N/A	N/A	3.50
6" Meter (Residential and Commercial)			
First 310,000 gallons	2.60	3.40	2.40
Over 310,000 gallons	3.10	4.15	3.50
Water Spinling Day (All gallons)	1.20	N/A	N/A
Water Spinkling Night(all gallons)	0.90	N/A	N/A
Irrigation (all gallons)	N/A	N/A	1.20

RATE DESIGN (Cont.)

 Sta	ff I	Zec.	ome	nen	ded	
 ota	12 I	vcc.	01111	исп	aca	

								Committee												
	Curr	ent Rates	Company I	Proposed Rates			S	ervice												
Service Line and Meter	Tota	Charges	Total	Charges	Line	Line Charge		Meter Charge		Total Charges										
Installation Charges								_												
5/8" x 3/4" Meter		\$50	9	\$600	\$	445	•	155	\$	600										
3/4" Meter		N/A	9	\$700 \$445 \$255		\$700		\$255		700										
1" Meter		N/A	\$810 \$495 \$315		\$810 \$495 \$315		\$810 \$495 \$315		\$810 \$495 \$315		\$315		\$315		\$315		\$495 \$315 \$81		\$810	
1½" Meter		N/A	\$	1,075	\$	550	Ş	525	\$1,075											
	Turbo	Compound	Turbo	Compound	Turbo	Compound	Turbo	Compound	Turbo	Compound										
2" Meter	N/A	N/A	1,875	2,720	830	830	1,045	1,890	1,875	2,720										
3" Meter	N/A	N/A	2,715	3,710	1,045	1,165	1,670	2,545	2,715	3,710										
4" Meter	N/A	N/A	4,160	5,315	1,490	1,670	2,670	3,645	4,160	5,315										
6" Meter	N/A	N/A	7,235	9,250	2,210	2,330	5,025	6,920	7,235	9,250										
Over 6-inch			At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost	At Cost										

Other Service Charges	<u>(</u>	Company Proposed	
	Current Rates	Rates	Staff Recommended Rates
Establishment	N/A	\$30.00	\$30.00
Reconnection (Delinquent)	N/A	\$30.00	\$30.00
Meter Test (If Correct)	\$40.00	\$40.00	\$40.00
Deposit	N/A	*	. *
Deposit Interest	N/A	*	*
NSF Check	\$10.00	\$30.00	\$25.00 (a)
Deferred Payment (per month)	N/A	**	**
Meter Re-read	\$10.00	\$25.00	\$25.00
Late Payment Fee (per month)	N/A	1.5% per month	1.5% per month
After Hour Service Charge (at customers request)	N/A	\$35.00	\$35.00

^(*) Per Rule R14-2-403(B).

^(**)Per Rule R14-2-409(G)

⁽a) The Company may only charge one NSF fee when customers are billed for water and sewer services on one bill.

Typical Bill AnalysisGeneral Service 5/8 x 3/4-Inch Meter Residential

Company Proposed	Gallons	Present Rates		roposed Rates		Dollar Increase	Percent Increase
Average Usage	5,032	\$	15.05	\$ 25.11	\$	10.06	66.85%
Median Usage	2,934	\$	11.90	\$ 20.71	\$	8.81	74.00%
Staff Recommended							
Average Usage	5,032	\$	15.05	\$ 17.88	\$	2.83	18.80%
Median Usage	2,934	\$	11.90	\$ 12.93	\$	1.03	8.68%

Present & Proposed Rates (Without Taxes) General Service 5/8 x 3/4-Inch Meter

Gallons	Present		Company Proposed		Staff Recommended	
	Minimum Charge \$	9.00	Minimum Charge \$	16.57	Minimum Charge \$	10.00
	Flat Rate \$	1.50	1st Tier Rate \$	1.41	1st Tier Rate \$	1.00
	Gallons in Minimum	1,000	1st Tier Breakover	3,000	1st Tier Breakover	3,000
			2nd Tier Rate \$	2.12	2nd Tier Rate \$	2.40
			2nd Tier Breakover	9,000	2nd Tier Breakover	9,000
			3rd Tier Rate \$	2.54	3rd Tier Rate \$	3.50

Consumption	Rates	Rates		Increase	Rates		Increase
-	9.00		16.57	84.11%		10.00	11.11%
1,000	9.00		17.98	99.78%		11.00	22.22%
2,000	10.50		19.39	84.67%		12.00	14.29%
3,000	12.00		20.80	73.33%		13.00	8.33%
4,000	13.50		22.92	69.78%		15.40	14.07%
5,000	15.00		25.04	66.93%		17.80	18.67%
6,000	16.50		27.16	64.61%		20.20	22.42%
7,000	18.00		29.28	62.67%		22.60	25.56%
8,000	19.50		31.40	61.03%		25.00	28.21%
9,000	21.00		33.52	59.62%		27.40	30.48%
10,000	22.50		36.06	60.27%		30.90	37.33%
11,000	24.00		38.60	60.83%		34.40	43.33%
12,000	25.50		41.14	61.33%		37.90	48.63%
13,000	27.00		43.68	61.78%		41.40	53.33%
14,000	28.50		46.22	62.18%		44.90	57.54%
15,000	30.00		48.76	62.53%		48.40	61.33%
16,000	31.50		51.30	62.86%		51.90	64.76%
17,000	33.00		53.84	63.15%		55.40	67.88%
18,000	34.50		56.38	63.42%		58.90	70.72%
19,000	36.00		58.92	63.67%		62.40	73.33%
20,000	37.50		61.46	63.89%		65.90	75.73%
25,000	45.00		74.16	64.80%		83.40	85.33%
30,000	52.50		86.86	65.45%		100.90	92.19%
35,000	60.00		99.56	65.93%		118.40	97.33%
40,000	67.50		112.26	66.31%		135.90	101.33%
45,000	75.00		124.96	66.61%		153.40	104.53%
50,000	82.50		137.66	66.86%		170.90	107.15%
75,000	120.00		201.16	67.63%		258.40	115.33%
100,000	157.50		264.66	68.04%		345.90	119.62%



ENGINEERING REPORT FOR Greenehaven Water Company, Inc.

Docket No. W-02325A-14-0322 (Rates)

By Jeff Francis

January 16, 2015

CONCLUSIONS

- 1. Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Staff ("Utilities Staff" or "Staff") concludes that the Greenehaven Water Company, Inc. ("Greenehaven" or "Company") water system has adequate storage and well production capacity to serve the present customer base and reasonable growth.
- 2. Customer growth in the Greenehaven service area is expected to be minimal at least through 2015.
- 3. Water Loss for Greenehaven was calculated to be 15.85 percent during the test year.
- 4. The Arizona Department of Environmental Quality ("ADEQ") regulates the Greenhaven water system under ADEQ Public Water System Identification ("PWS ID") No. 03-037. According to ADEQ Drinking Water Compliance Status Report ("CSR"), dated October 1, 2014, ADEQ has determined that the Greenehaven PWS is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4, and is in compliance.
- 5. The Greenehaven water system is not located within an Arizona Department of Water Resources ("ADWR") Active Management Area ("AMA").
- 6. ADWR has reported that Greenehaven is currently compliant with departmental requirements governing water providers and/or community water systems.
- 7. A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Greenehaven.
- 8. Greenehaven has approved Curtailment and Backflow Tariffs on file with the Commission.

RECOMMENDATIONS

1. Water loss for Greenehaven was calculated to be 15.85 percent in 2013 which exceeds acceptable limit of 10 percent. Staff recommends that Greenehaven monitor the water system and submit the gallons pumped and sold to determine the non-account water for one

full year. The Company should coordinate when it reads the well meter each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent%, the Company shall prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

- 2. Staff recommends an annual water testing expense of \$1,217 be used for purposes of this application.
- 3. Staff recommends that the Company use the depreciation rates presented in Table C.
- 4. Greenehaven proposes to increase its existing service line and meter installation charges. Staff recommends that the charges listed under "Company Proposed/Staff Recommended" in Table D be adopted.
- 5. Staff recommends that Greenehaven file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three Best Management Practices ("BMPs") in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created Staff available on the Commission's website http://www.azcc.gov/Divisions/Utilities/Water/forms.asp Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.
- 6. Staff recommends that Greenehaven post a sign at its well and tank site which meets the following. The sign should comply with ADEQ requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s). Staff further recommends that the Company file documentation with Docket Control demonstrating compliance within forty-five (45) days of the effective date of the Commission Decision in this matter.

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A. INTRODUCTION AND LOCATION OF COMPANY

On September 3, 2014, Greenehaven Water Company, Inc. ("Greenehaven" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") to increase its rates (Docket No. W-02325A-14-0322). The Company's current rates were approved in Commission Decision No. 54777, dated December 1, 1985. The ACC Utilities Division Staff ("Utilities Staff" or "Staff") engineering review and analysis of the rate application filed on September 3, 2014, is presented in this report.

Greenehaven is a Class D water utility company that provides public utility water service to 315 metered connections in the Greenehaven Development, which is an isolated development, adjacent to the Lake Powell National Recreation Area located in Coconino County approximately six miles northeast of Page, AZ. Figure 1 shows the location of the Company, Figure 2 shows the Certificate of Convenience and Necessity ("CC&N") which covers just over 420 acres, and Figure 3 shows Greenehaven Development lot layout. The CC&N was granted in Commission Decision No. 49080 dated June 16, 1978.

B. DESCRIPTION OF THE WATER SYSTEM

The Greenehaven water system was visited on September 24, 2014, by Staff member Jeff Francis. Mr. Francis was accompanied by Mr. Terry Theken. Mr. Theken is the owner of the Company. According to Arizona Department of Environmental Quality ("ADEQ") records Ted Clouse is the Company's Certified Operator. Mr. Clouse was not present during Staff's site visit.

The water is pumped by a 50 HP submersible primary well pump. This pump discharges water to a 500,000 gallon storage tank. The well pump has a yield of 250 gallons per minute ("GPM"). The water is metered before it enters the storage tank and from there it is delivered to distribution via a gravity zone and four pressure zones. The distribution system presently serves 401 metered connections.² Water level in the storage tank is automatically controlled. A water system schematic is shown in Figure 4 and Table A includes a detailed plant facility listing.

¹ Mr. Clouse is a Certified Grade 2 Water Distribution System Operator and a Grade 2 Water Treatment Plant Operator, ADEQ Operator Identification No. OP000378.

² Meter count based on Annual Report and discussions with Company representative at the time of Staff's inspection.

Table A. Plant Facilities Summary³

Well Data

ADWR Well Registration No.	55-600601	
ADWR System ID	91-000099.0000	
Casing Size	12 inch	
Casing Depth	935 feet	
Pump Size Horsepower (hp)	50 hp	
Pump Yield	250 gpm	
Meter Size	8 inch	

Water Tanks, Booster Systems, Structures & Generators

water raines, booster bysteins, birdetures & Generators					
Structure or Equipment	Location	Quantity - Capacity, Size			
Storage Tank	Well Site	1 – 500,000 gallon			
Booster Pumps	Well Site	3 – 2 @ 5 hp, 1 @ 10 hp			
Pump House	Well Site	Fully enclosed & locked structure			
Backup Generator	Well Site	Propane powered, xx KWh			
Pressure Reducing Station	Various	4			
Security Fencing	Around Well & Tanks				

Distribution Mains

Diameter	Material	Length		
4 inches	PVC	450 feet		
6 inches	asbestos-cement	7,200 feet		
8 inches	PVC	28,100 feet		
10 inches	PVC	2,200 feet		
10 inches	asbestos-cement	2,040 feet		

Meters

Size		Quantity	
5/8 x 3/4	inch	395	
1 inch		6	

Fire Hydrants

	J	
Size/Description	Quantity	
Standard	99	

³ The information listed was based on one, or a combination of, the following sources: 1) Company's Application, 2) Commission Annual Reports, 3) Arizona Department of Water Resources Records, 4) Information contained in the Company's Response to a Staff Data Request and, 5) Information collected during Staff's site visit.

COCONINO COUNTY

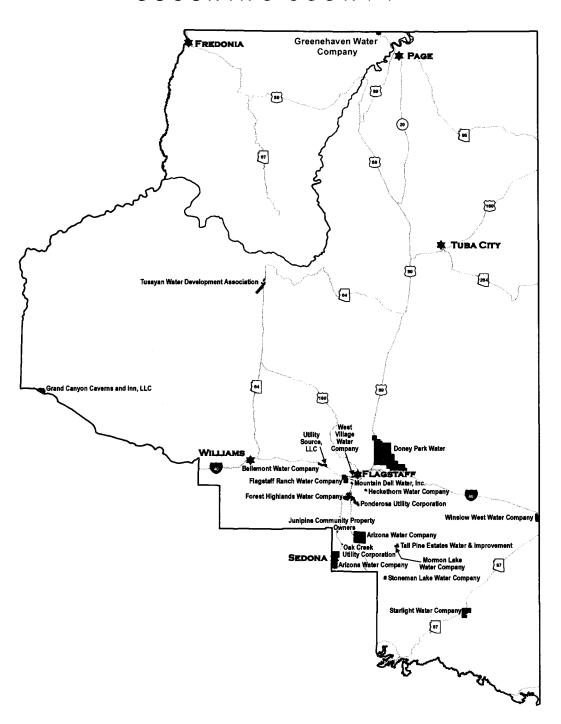


Figure 1. County Map

Utah

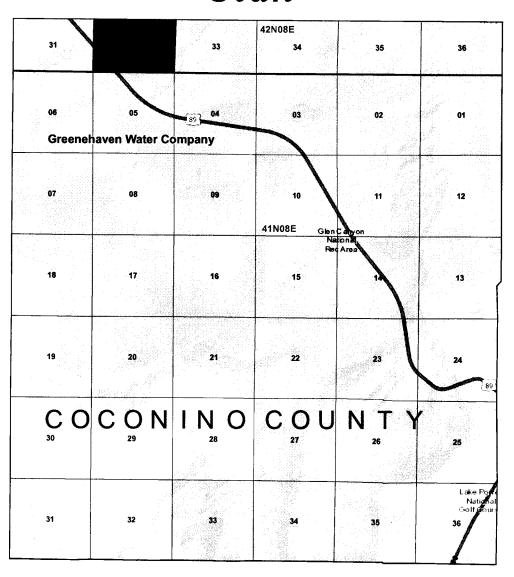


Figure 2. Certificated Area

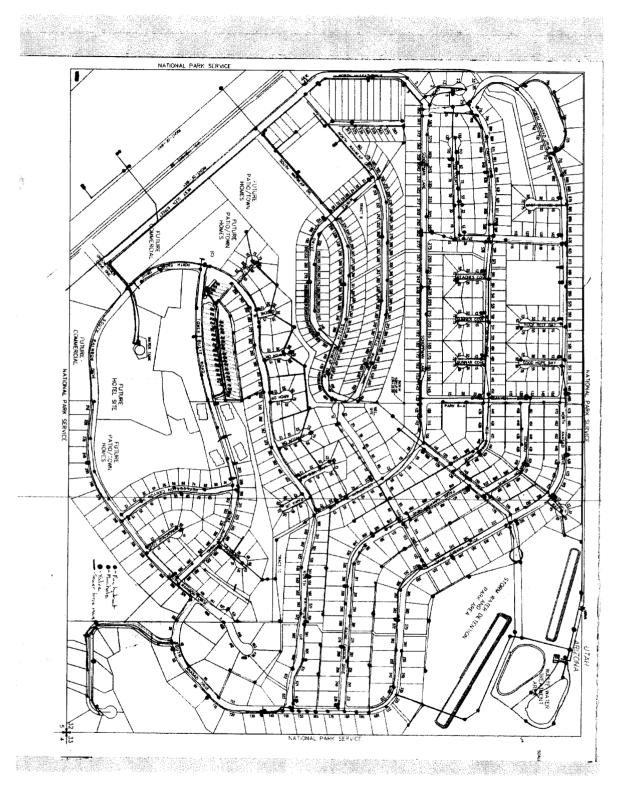


Figure 3. Greenehaven Development Lot Layout

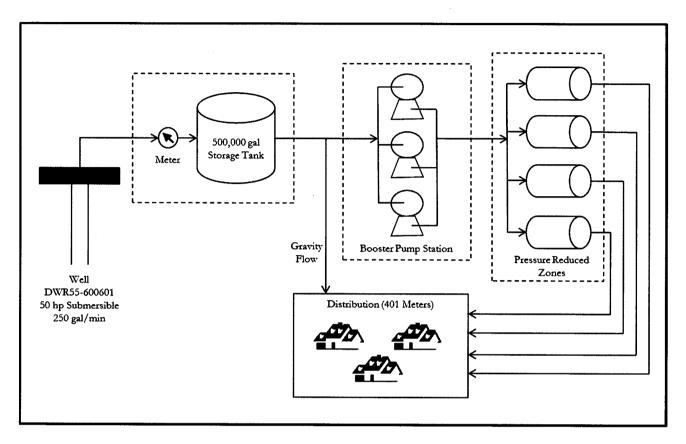


Figure 4. Water System Schematic

C. WATER USE

Water Sold

Figure 5 presents the water consumption data provided by the Company for the test year ending December 31, 2013. Customer consumption included a high monthly water use of 452 gallons per day ("GPD") per connection in June, and the low water use was 135 GPD per connection in December. The average use for the twelve-month period was 285 GPD per connection. The Company reported 24,478,000⁴ gallons of water sold during the test year.

⁴ Total water sold during the test year based on the monthly data.

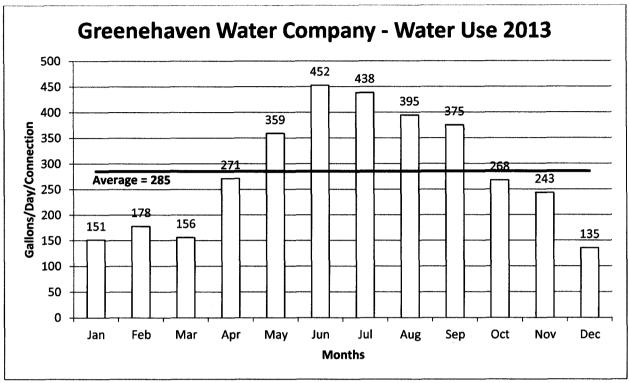


Figure 5. Water Use

Non-Account Water

Non-account water should be 10 percent or less. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a company to identify water and revenue losses due to leakage, theft and flushing. Greenehaven reported 29,089,000 gallons of water pumped and 24,478,000 gallons of water sold during the test year ending December 31, 2013, resulting in a water loss of 15.85 percent, which exceeds the acceptable limit of 10 percent. Staff discussed this excessive water loss with the Company during the site visit and was informed of two potential causes and remedies. First, the Company found a broken check valve in the water supply line to the storage tank which has been allowing water to continuously backflow into the well after having been pumped through the meter. Greenehaven has ordered a new check valve and will install it upon delivery. Second, the Company has started a meter replacement program. In 2013 there were 4 meters replaced, and in 2014 there were one commercial and 29 residential meters replaced.

Staff recommends that Greenehaven monitor the water system and submit the gallons pumped and sold to determine the non-account water for one full year. The Company should coordinate when it reads the well meter each month with customer billing so that an accurate accounting is determined. The results of this monitoring and reporting shall be docketed as a compliance item in this case within 13 months of the effective date of the order issued in this proceeding. If the reported water loss is greater than 10 percent, the Company shall prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If the

Company believes it is not cost effective to reduce the water loss to less than 10%, it should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted, shall be docketed as a compliance item within 13 months of the effective date of the order issued in this proceeding.

System Analysis

The Greenehaven water system well production capacity is 250 gpm and the system currently has 500,000 gallons of storage capacity. There are 99 fire hydrants in the distribution system however the system is not subject to a formal fire flow requirement. The system had 235 customers during the peak month of July 2013 when the Company reported 3,193,000 gallons sold. Staff concludes that the Greenehaven water system has adequate production and storage capacity to serve the present customer base and reasonable growth.

D. GROWTH

The average number of customers served by Greenehaven has increased by eleven since 2011. The Company reported 226 customers served at year end 2011 and 235⁵ customers served year end 2013. The Company expects growth to be minimal.⁶ Historical growth for 2011 through 2013 is based on the data reported by the Company in its annual reports submitted to the Commission.

E. ADEQ COMPLIANCE

Compliance

ADEQ regulates the Greenehaven water system under ADEQ Public Water System Identification ("PWS ID") No. 03-037. ADEQ inspected the Greenehaven water system on July 17, 2012. During the inspection no major deficiencies were found in the operation, maintenance, or certified operator status of the water system.

According to ADEQ Drinking Water Compliance Status Report ("CSR"), dated October 1, 2014, ADEQ has determined that Greenehaven PWS is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4, and is in compliance.

⁵ See number of customers listed under water use data on page 18 of the Application.

⁶ Based on discussion with Company during site visit.

Water Testing Expense

In addition to Total Coliform and Lead & Copper testing, the Company is subject to mandatory participation in the Monitoring Assistance Program ("MAP").7 The Company reported water testing expenses of \$1,673.37 (including the MAP fee) during the test year. Staff has reviewed and recalculated these expenses. Table B presents Staff's adjusted annual water testing expense.

Table B. Water Testing Cost

Monitoring	Cost per Test	Quantity of Tests per 3 years	3 Year Testing Costs	Annual Testing Cost
Total Coliform	\$20	36 ⁽¹⁾	\$ 720	\$240
MAP - IOCs, SOCs, VOCs, Nitrate, Nitrite, Asbestos, Radiochemicals	\$828 ⁽²⁾	3	\$2,484	\$828
Lead & Copper	\$34	10 ⁽³⁾	\$340	\$113
Shipping cost for Pb & Cu tests		1	\$107	\$36
Total Cost			\$3,544	\$1,217

- Notes: (1) Assumes one test monthly (based on one Point of Entry).
 - (2) The ADEQ MAP invoice for Calendar Year 2013 was \$828.25.
 - (3) Assumes lead and copper testing will remain at 10 tests triennially.

Staff recommends an annual water testing expense of \$1,217 be used for purposes of this application.

F. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

The Greenehaven service area is not located within any ADWR Active Management Area ("AMA"). ADWR's Water Provider Compliance Report, dated October 17, 2014, indicates that Greenehaven is currently compliant with departmental requirements governing water providers and/or community water systems.

G. ACC COMPLIANCE

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Greenehaven.8

⁷ The MAP program is mandatory for water systems which serve less than 10,000 persons (approximately 3,300 service connections).

⁸ Per Compliance Section email dated September 10, 2014.

H. DEPRECIATION RATES

The following table lists the annual depreciation rates by NARUC plant category currently recommended by Staff. These rates represent typical and customary values within a range of anticipated equipment life. Staff recommends that the Company use the depreciation rates presented in Table C.

Table C. Depreciation Rate Table for Water Companies

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.50
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.00
320.3	Point-of-Use Treatment Devices	10	10.00
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant		

I. OTHER ISSUES

Service Line and Meter Installation Charges

Greenehaven proposes to increase its existing service line and meter installation charges. The proposed charges are refundable advances and are within the Staff's typical range of charges for service line and meter installations. Since Greenehaven may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Staff recommends that the charges listed under "Company Proposed/Staff Recommended" in Table D be adopted.

Table D. Service Line and Meter Installation Charges

		Company Proposed/Staff Recommended		
Meter Size	Company Current Tariff	Service Line Charge	Meter Charge	Total Charge
5/8 x 3/4-inch	\$50	\$445	\$155	\$600
3/4-inch	_	\$445	\$255	\$700
1-inch	-	\$495	\$315	\$810
1-1/2-inch	-	\$550	\$525	\$1,075
2-inch Turbine	_	\$830	\$1,045	\$1, 875
2-inch Compound	_	\$830	\$1,890	\$2,720
3-inch Turbine	_	\$1,045	\$1,670	\$2,715
3-inch Compound	-	\$1,165	\$2,545	\$3,710
4-inch Turbine		\$1,490	\$2,670	\$4,16 0
4-inch Compound	_	\$1,670	\$3,645	\$5,315
6-inch Turbine		\$2,210	\$5,025	\$7,235
6-inch Compound	-	\$2,330	\$6,920	\$9,250
Over 6-inch		At Cost	At Cost	At Cost

⁹ The Company's current charges were approved in Decision No. 54777.

Curtailment Tariff

Greenehaven has an approved Curtailment Tariff on file with the Commission. 10

Backflow Prevention Tariff

Greenehaven has an approved Backflow Prevention Tariff on file with the Commission.¹¹

Best Management Practices ("BMP") Tariff

Staff recommends that Greenehaven file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at http://www.azcc.gov/Divisions/Utilities/Water/forms.asp

Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

Posting of Sign at Facility Site

During its site inspection Staff noted that a sign listing the Company's identification information was not posted at the well and tank site. Staff recommends that Greenehaven post a sign at its well and tank site which meets the following. The sign should comply with ADEQ requirements and include the following information: system name, system PWS ID number and emergency contact phone number(s). Staff further recommends that the Company file documentation with Docket Control demonstrating compliance within forty-five (45) days of the effective date of the Commission Decision in this matter.

¹⁰ See Docket W-02325A-10-0502.

¹¹ See Docket W-02325A-10-0503.